CLAIMS

What is claimed is:

1. A method for determining a perceived signal to noise indication (PSNI) for management of a wireless network, comprising:

basing the PSNI on a parameter obtained by measuring a signal obtained at a given location in a receiving device; and

specifying a PSNI indicator value with respect to a frame error rate (FER) obtained at the receiving device.

2. The method of claim 1 further comprising:

employing PSNI parameters as a signal quality indicator of one of bit error rate (BER) and frame error rate (FER) to facilitate reconfiguration and management of the network to optimize network performance.

3. The method of claim 1 further comprising:

adjusting the parameter to account for decoder losses of an FEC decoder downstream relative to the measurement point.

4. The method of claim 1 further comprising:

adjusting the parameter to account for losses downstream relative to the measurement point.

5. The method of claim 4 wherein the parameter is obtained from a demodulator in the receiving device.

6. The method of claim 4 wherein the parameter is invariant with respect to data rate.

7. The method of claim 4 wherein the parameter is one of base band phase jitter and base band error vector magnitude.

8. The method of claim 4 wherein the parameter is spreading code correlation quality.

9. The method of claim 1 further comprising:

obtaining the measurement at an output of a receiving antenna for said receiving device.

10. The method of claim 1 wherein the parameter is one of frequency tracking and channel tracking stability.

11. The method of claim 1 wherein the step of specifying the PSNI value further comprises:

specifying PSNI indicator values with respect to the obtained FER at at least one particular data rate/demodulator/forward error correction (FEC) combination point.

12. The method of claim 1 further comprising obtaining the measurement at an internal point of a demodulator provided in the receiving device.

13. The method of claim 1 further comprising obtaining the measurement point at an output of a radio front end which is part of the receiving device.

14. The method of claim 1 further comprising obtaining the measurement at an output of a demodulator provided in the receiving device.

15. The method of claim 1 wherein said PSNI is logarithmically scaled to a perceived signal to noise plus interference value.

16. A method for use in wireless network management, comprising:

determining a perceived signal to noise indication (PSNI) by measuring a signal at an access point (AP) at a receiving location, wherein a signal to noise plus interference value (S/N+I) is determined from a parameter of the measured signal; and

adjusting the parameter to compensate for losses downstream relative to the access point (AP).

17. The method of claim 16 wherein the signal is measured at an AP of a demodulator at said receiving location.

18. The method of claim 16 wherein the signal is measured at an AP of a receiver at said receiving location.

19. The method of claim 16 further comprising:

converting the signal to base band; and

providing automatic gain control to the base band signal to maintain base band power constant.

20. The method of claim 19 wherein the PSNI is obtained after receipt, analog to digital conversion, and demodulation of the signal physical layer (PHY) specific and directly relates to the observed frame error rate obtained from a forward error correction (FEC) decoder.

21. The method of claim 20 wherein a frame error rate (FER) is obtained from a frame check cyclic redundancy check (CRC).

22. Apparatus for management of a wireless network, comprising:

means for determining a perceived signal to noise indication (PSNI) by measuring a signal at an access point (AP), wherein the PSNI is determined based upon a parameter of the signal obtained at said AP; and

means for adjusting the parameter to account for decoder losses downstream relative to the measurement point.

23. The apparatus of claim 22 further comprising means for relating the PSNI value to a frame error rate (FER) obtained downstream relative to said AP.

24. The apparatus of claim 23 wherein the means for relating the PSNI value further comprises:

means for specifying the PSNI values with respect to the obtained FER at at least one particular data rate/demodulator/forward error correction (FEC) combination point.

25. The apparatus of claim 22 wherein said AP is an internal point of a demodulator provided in a receiver.

26. The apparatus of claim 25 wherein said AP is located at an output of a receiving antenna for delivering a received signal to said receiver.

27. The apparatus of claim 25 wherein said AP is located at an output of a radio front end which is part of said receiver.

28. The apparatus of claim 25 wherein said AP is located at an output which is a demodulator of the receiver.

29. The apparatus of claim 22 wherein said PSNI is logarithmically scaled to a perceived signal to noise plus interference value.

30. Apparatus for management of a wireless network, comprising:

means for determining a perceived signal to noise indication (PSNI) by measuring a signal at an access point (AP) wherein a signal to noise plus interference value (S/N+I) is determined from a parameter of said signal in a demodulator receiving said signal; and

means for adjusting the parameter to account for losses downstream relative to the demodulator.

31. The apparatus of claim 30 further comprising:

means for converting the signal to base band; and

means for providing automatic gain control to the base band signal to maintain base band power constant.

32. The apparatus of claim 31 wherein said AP is downstream to a receiver, an analog to digital converter and demodulator and directly relates to an observed frame error rate obtained from a forward error correction (FEC) decoder.

33. The apparatus of claim 32 wherein a frame error rate (FER) is obtained by means employing a frame cyclic redundancy check (CRC).

34. The apparatus of claim 30 wherein the means for adjusting comprises:

means for adjusting the parameter to account for forward error correction decoder losses which occur downstream relative to the demodulator.

35. The apparatus of claim 30 further comprising:

a forward error correction (FEC) decoder;

means for creating a replica of correct input bits inputted to the decoder;

means for comparing the created input bits with corresponding bits inputted to the decoder to determine a bit error rate (BER); and

means responsive to the BER and the FEC decoder output to estimate a frame error rate (FER).

36. The apparatus of claim 30 wherein the parameter is one of base band phase jitter and base band error vector magnitude.

37. The apparatus of claim 30 wherein the parameter is spreading code correlation quality.

38. The apparatus of claim 30 wherein the parameter is one of frequency tracking and channel tracking stability.

39. The apparatus of claim 30 further comprising:

means employing a PSNI obtained as a signal quality indicator of one of bit error rate (BER) and frame error rate (FER) to facilitate reconfiguration and management of the network to optimize network performance.

40. The apparatus of claim 30 wherein said AP is an internal point of a demodulator provided in a receiver.

41. The apparatus of claim 30 wherein said AP is located at an output of a receiving antenna for delivering a received signal to said receiver.

42. The apparatus of claim 30 wherein said AP is located at an output of a radio front end which is part of said receiver.

43. The apparatus of claim 30 wherein said AP is located at an output which is a demodulator of the receiver.